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Programming & Customizing the 8051 Microcontroller details the features of the 8051 and demonstrates how to use these embedded chips to access and control many different devices. This book shows you what happens within the 8051 when an instruction is executed, and it demonstrates how to interface 8051's with external devices. Giving you a wide range of experiments and exercises that provide hands-on experience with the 8051, this book also features:

- Clear explanations of how the devices are electronically programmed, along with a design for Atmel 2010 microcontroller programmer that you build
- Tools for developing 8051 applications
- Two sample 8051 real time operating systems
- Help in programming both assembly language and high-level applications
- Tips to make code development and debugging easier

In addition, extensive appendices give you even more resources for help in developing and debugging 8051 applications, as well as expert tips on avoiding typical application problems.

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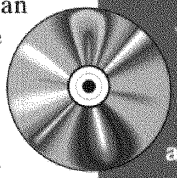

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- Features source code for all applications and experiments
- Demonstration copy of "UMPS" IDE (Integrated Development Environment)
- PDF data sheets featuring the Dallas semiconductor "high-speed microcontroller" Atmel flash-based 8051 compatibles

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